

Bayou Terrebonne East Bank Hydrologic Restoration Project (TE 10-5)

Coast 2050 Strategy – Region 3, Strategy 10 - Restore hydrologic conditions at tidal exchanges.

Project Location - Region 3, Terrebonne Basin, Terrebonne Parish, east bank of Bayou Terrebonne from Madison Canal southward to near Sea Breeze Pass.

Problem - The dredging of access canals through east bank of Bayou Terrebonne and the deterioration/erosion of sections of that bank are allowing saline Lake Barre waters to enter Bayou Terrebonne where other canals into the Lake Boudreaux Basin via Robinson Canal and Boudreaux Canal transport them. These canals have short-circuited flow through the existing natural bayous, thereby increasing tidal exchange and saltwater intrusion. Monitoring of area salinities and flow patterns has provided evidence of this problem.

Goals - Restore and maintain the east bank of Bayou Terrebonne providing a critical hydrologic barrier between the saline Lake Barre water and low-salinity Lake Boudreaux Basin marshes.

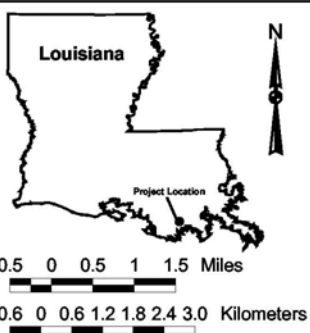
Proposed Solution - Construct 6 canal plugs, repair one deteriorated canal plug, install 4 passive sheetpile constriction structures on canals, and construct 3 segments of low-level riprap shore protection totaling approximately 3,700 linear feet. This would prevent breaching of deteriorated banks and subsequent establishment of new hydrologic exchange points. Maintenance would be required for each of above listed features.

Project Benefits - The project would affect almost 21,000 acres of intermediate, brackish, and saline marsh and open water. Over the 20-year project life, it would protect a net of 144 acres of marsh compared to the without-project condition.

Project Costs - Total fully funded cost is \$17,172,700; fully funded first cost is \$10,331,200.

Risk/Uncertainty and Longevity/Sustainability - There is a moderate degree of risk associated with this project given the complexity of area hydrology. The project should continue providing benefits more than 20 years after construction because of materials, designs, and maintenance of project features.

Sponsoring Agency and Contact Person - U.S. Fish and Wildlife Service
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- Project area
- Proposed dike
- Proposed plug
- Proposed constriction structure

Data Source:
 U.S. Geological Survey
 National Wetlands Research Center
 Coastal Restoration Field Station

LA Department of Natural Resources
 Coastal Restoration Division

Map Date: November 14, 2001
 Map ID: 200204120

Image Data:
 1990 SPOT Panchromatic

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 Region 3

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